

# SERVICE MANUAL

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STEREO RADIO  
CASSETTE PLAYER

BASIC TAPE MECHANISM : 4ZM-2 P3N

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**aiwa**

S/M Code No. 09-99C-423-2R1

REVISION

## SPECIFICATIONS

<b>Frequency range:</b>	FM: 87.5 – 108MHz AM: 530 – 1710kHz <YL> AM: 530 – 1605kHz <YZ, YJ>
<b>Maximum output:</b>	15 mW + 15 mW (EIAJ/32 ohm) <YL> 4 mW + 4 mW (EIAJ/16 ohm) <YZ, YJ>
<b>Power source:</b>	DC 3V using two R6 (size AA) batteries
<b>Maximum dimensions:</b>	92.0 (W) x 116.4 (H) x 37.6 (D) mm (3 <sup>5</sup> / <sub>8</sub> x 4 <sup>5</sup> / <sub>8</sub> x 1 <sup>1</sup> / <sub>2</sub> in.)
<b>Weight:</b>	Approx.138 g (5 oz) (excluding batteries)

- Design and specifications are subject to change without notice.

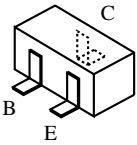
## ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-HRJ-907-010	IB, Y	(EDPOHCZ) -IN<YZ>
1	8A-HRJ-906-010	IB, Y	(EGFSI) -IN<YZ>
1	8A-HRJ-908-010	IB, YJ	(ESC) IN<YJ>
1	8A-HRJ-905-010	IB, YL	(3L) IN<YL>
2	84-447-019-310		CLIP, BELT
3	87-B30-080-110		HEADPHONE, HP-M009 (F) <YLBS>
3	87-B30-255-010		HEADPHONE, HP-M007B (S) <EXCEPT YLBS>

ELECTRICAL MAIN PARTS LIST

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION	REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
IC				C307	87-A11-596-080		C-CAP,S 0.068-16 K B
				C308	87-A11-596-080		C-CAP,S 0.068-16 K B
				C309	87-A11-565-080		C-CAP,S 8200P-50 K B
	87-A21-387-040	C-IC,TA2145F		C310	87-A11-565-080		C-CAP,S 8200P-50 K B
	87-A20-851-040	C-IC,TA2111F		C311	87-A11-564-080		C-CAP,S 6800P-50 K B
TRANSISTOR							
	87-A30-159-080	C-TR,KTA1298Y		C312	87-A11-564-080		C-CAP,S 6800P-50 K B
	87-026-261-080	C-TR,RN1404		C313	87-015-676-040		CAP,E 47-6.3 7L SRA
	87-026-264-080	C-TR,RN1411		C314	87-A10-489-040		CAP,E 220-4 7L SR
	87-026-262-080	C-TR,RN1407		C315	87-A11-581-080		C-CAP,S 0.027-16 K B
	89-327-125-080	C-TR,2SC2712GR		C316	87-A11-581-080		C-CAP,S 0.027-16 K B
DIODE							
	87-A40-630-040	C-DIODE,RB411D		C317	87-A11-733-080		C-CAP,S 1-16 Z F
	87-020-027-080	C-DIODE,1SS184		C318	87-A11-733-080		C-CAP,S 1-16 Z F
MAIN C.B							
BPF101	87-A91-680-010	FLTR,GFMB5-C3		C319	87-A11-733-080		C-CAP,S 1-16 Z F
C1	87-A11-556-080	C-CAP,S 2200P-50 K B		C320	87-A11-733-080		C-CAP,S 1-16 Z F
C2	87-A11-556-080	C-CAP,S 2200P-50 K B		CF101	87-A91-087-010		FLTR,PFS 450A6 B
C3	87-A11-551-080	C-CAP,S 1000P-50 K B		CF102	87-A90-577-010		FLTR,KIT SN
C4	87-A11-551-080	C-CAP,S 1000P-50 K B		J1	85-HRL-623-010		JACK,3.5 ST BLK
C5	87-010-501-040	CAP,E 47-4 M 5L SRE		J2	87-A61-124-010		JACK,DC DIA2.75 BLK TC
C6	87-015-676-040	CAP,E 47-6.3 7L SRA		L1	87-A50-538-010		COIL,1UH RF CHOKE
C7	87-A11-565-080	C-CAP,S 8200P-50 K B		L2	87-005-849-080		COIL,10UH (CECS)
C8	87-A11-565-080	C-CAP,S 8200P-50 K B		L101	8A-HRJ-607-010		BAR-ANT,MW (KTR)
C9	87-A11-584-080	C-CAP,S 0.033-16 K B		L102	8A-HRJ-606-010		COIL,FM RF
C10	87-A11-584-080	C-CAP,S 0.033-16 K B		L103	8A-HRJ-605-010		COIL,FM OSC
C13	87-A11-551-080	C-CAP,S 1000P-50 K B		L104	87-A50-534-010		COIL,270UH AMOSC
C14	87-A11-551-080	C-CAP,S 1000P-50 K B		L105	87-A90-663-010		IFT,MW 5L H6.4
C15	87-015-676-040	CAP,E 47-6.3 7L SRA		R51	87-022-335-080		C-RES,S 180-1/10W F
C16	87-A11-718-080	C-CAP,S 0.1-25 Z F		SFR51	87-024-197-010		SFR,1K H VZ066L3
C17	87-A11-733-080	C-CAP,S 1-16 Z F		SW1	87-A90-133-110		SW,LEAF LSA1120JAU
C21	87-A10-489-040	CAP,E 220-4 7L SR		SW2	87-A90-216-010		SW SL 2-2-3 SK230
C22	87-A10-489-040	CAP,E 220-4 7L SR		SW3	87-A90-050-010		SW, SL 2-2-2 NS (BLK)
C23	87-A10-489-040	CAP,E 220-4 7L SR		PVC101	87-A91-507-010		TUN-CAP,20P-165P
C24	87-A11-726-080	C-CAP,S 0.33-16 Z F		VR1	87-A90-981-010		VR,RTRY 20KBX1
C25	87-A11-726-080	C-CAP,S 0.33-16 Z F		FRONT C.B			
C51	87-A11-733-080	C-CAP,S 1-16 Z F		LED101	87-A91-715-080		C-LED,17-21VRC/TR8 (HT) RED
C101	87-010-147-080	C-CAP,S 3P-50 CH<YZ,YJ>		LED451	87-A91-715-080		C-LED,17-21VRC/TR8 (HT) RED
C101	87-010-146-080	C-CAP,S 2P-50 C CH<YL>		SW301	87-036-146-080		C-SLIDE SWITCH 1-1-4
C102	87-012-150-080	C-CAP,S 20P-50 CH					
C103	87-010-315-080	C-CAP,S 27P-50 CH<YL,YJ>					
C103	87-012-149-080	C-CAP,S 30P-50 CH<YZ>					
C104	87-010-145-080	C-CAP,S 1P-50 CH<YL>					
C104	87-010-147-080	C-CAP,S 3P-50 CH<YZ,YJ>					
C105	87-A11-566-080	C-CAP,S 0.01-25 K B					
C106	87-A11-729-080	C-CAP,S 0.47-25 Z F					
C107	87-A11-733-080	C-CAP,S 1-16 Z F					
C108	87-A11-551-080	C-CAP,S 1000P-50 K B					
C109	87-016-462-080	C-CAP,S 1-16 F					
C110	87-010-196-080	C-CAP,0.1-25 Z F C2012					
C111	87-010-196-080	C-CAP,S 0.1-25 Z F C2012					
C112	87-A11-564-080	C-CAP,S 6800P-50 K B					
C113	87-A11-564-080	C-CAP,S 6800P-50 K B					
C114	87-A11-584-080	C-CAP,S 0.033-16 K B					
C115	87-A11-584-080	C-CAP,S 0.033-16 K B					
C116	87-015-688-040	CAP,E 4.7-35 M 7L SRA					
C117	87-010-452-080	C-CAP,1-16 Z F GRM42-6					
C118	87-A11-551-080	C-CAP,S 1000P-50 K B					
C119	87-010-503-040	CAP,E 220-4 GAS					
C130	87-012-140-080	C-CAP,S 470P-50 J CH					
C131	87-012-153-080	C-CAP,S 120P-50 CH					
C132	87-010-150-080	C-CAP,S 6P-50 CH					
C301	87-A11-559-080	C-CAP,S 3300P-50 K B					
C302	87-A11-559-080	C-CAP,S 3300P-50 K B					
C303	87-A11-720-080	C-CAP,S 0.15-50 Z F					
C304	87-A11-720-080	C-CAP,S 0.15-50 Z F					
C305	87-A11-733-080	C-CAP,S 1-16 Z F					
C306	87-A11-733-080	C-CAP,S 1-16 Z F					

TRANSISTOR ILLUSTRATION



RN1404  
RN1407  
RN1411  
KTA1298  
2SC2712

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち


Chip Resistor Part Coding

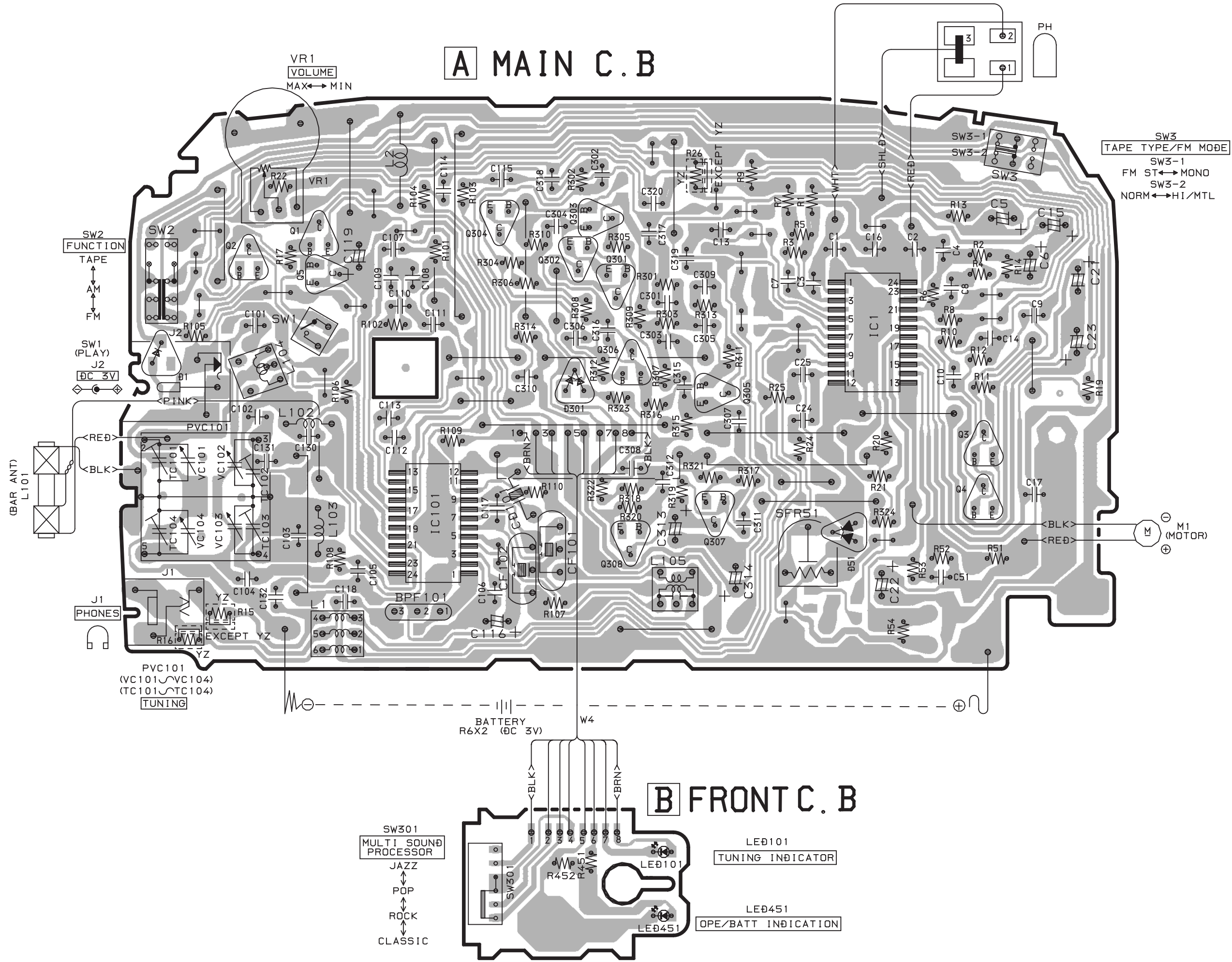


A  
抵抗部品コード  
Resistor Code

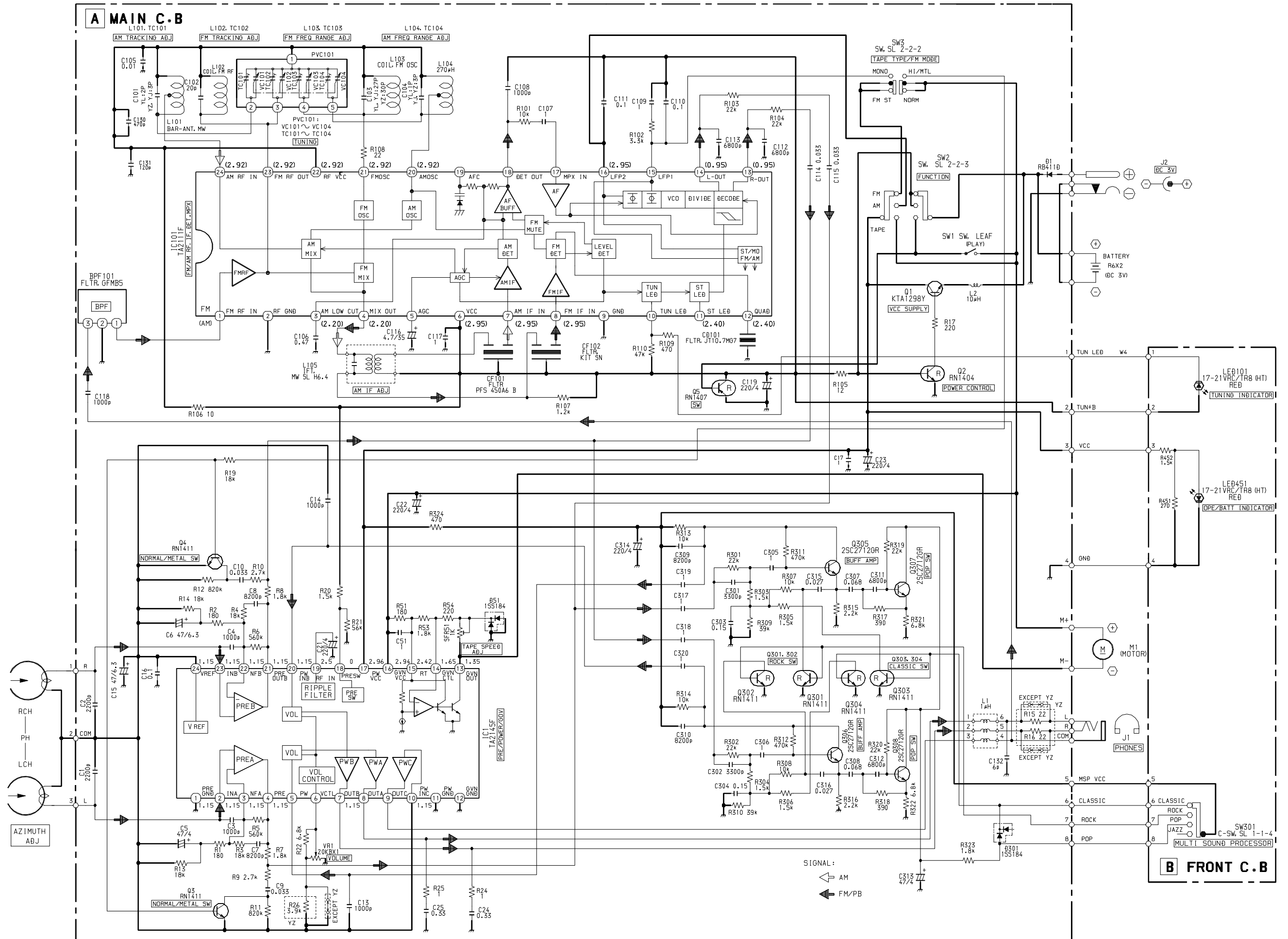
桁表示  
Figure  
抵抗値  
Value of resistor

チップ抵抗  
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード Resistor Code : A
				外形／Form	L	W	t	
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128



### SCHEMATIC DIAGRAM

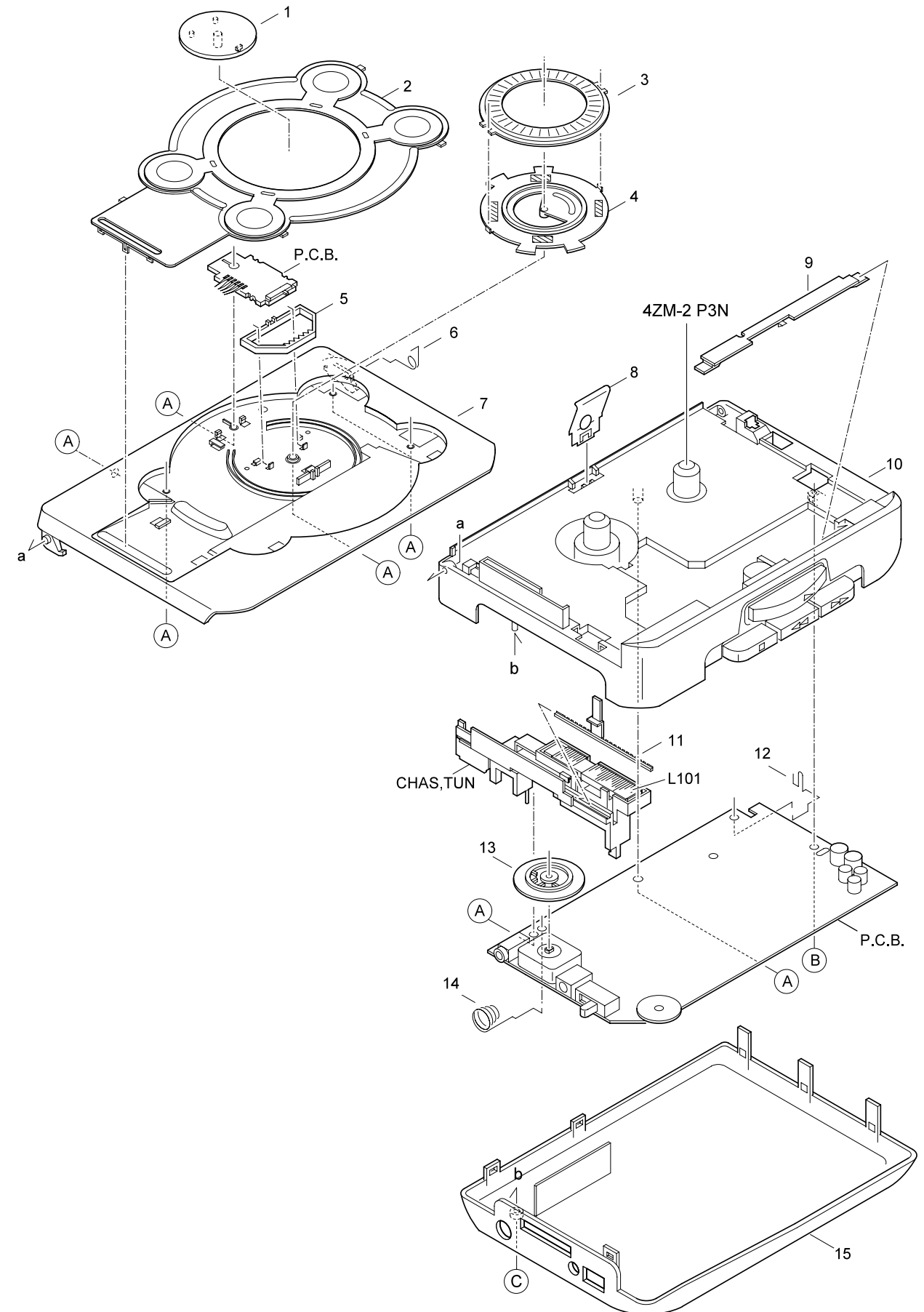


**A** MAIN C.B



- <TAPE PLAYER SECTION>

- MECHANICAL EXPLODED VIEW 1/1



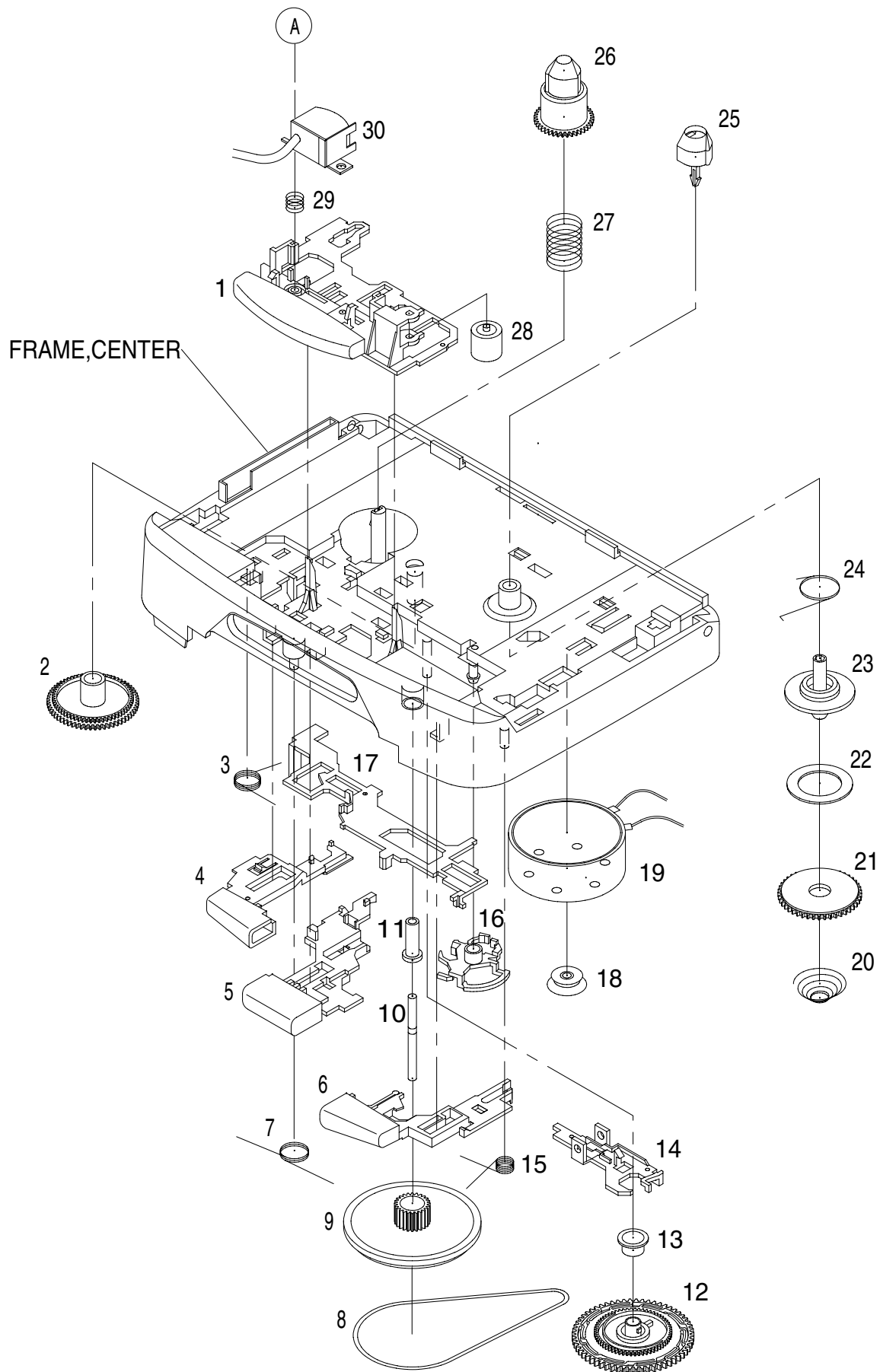
# MECHANICAL PARTS LIST 1/1

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-HG8-005-010		CAP, MSP
2	8A-HRJ-002-010		PANEL,MSP<[S]YL1,[S]YL>
2	8A-HRJ-012-010		PANEL,MSP YZ<EXCEPT [S]YL1,[S]YL>
3	8A-HRJ-003-010		KNOB,RTRY MSP
4	8A-HRJ-005-010		RING,MSP
5	8A-HRJ-201-010		RACK,MSP
6	86-HRM-205-010		SPR-T,CLICK
7	8A-HRJ-001-010		LID,CASS<[S]YL1,[S]YL,YJ>
7	8A-HRJ-011-010		LID,CASS YZ<[S]YZ>
7	8A-HRJ-015-010		LID,CASS YZ J-248B<[LM]YZ>
7	8A-HRJ-016-010		LID,CASS YZ J-B140<[LD]YZ>
8	8A-HRL-202-010		SPR-P,CASS
9	87-HRR-206-010		PLATE,HEAD J034<EXCEPT [LM]YZ,[LD]YZ>
9	88-HKB-205-010		PLATE,HEAD J240B<[LM]YZ,[LD]YZ>
10	88-HRJ-038-010		FRAME,CENTER J034<EXCEPT [LM]YZ,[LD]YZ>
10	88-HKA-027-010		FRAME,CENTER VIO<[LM]YZ,[LD]YZ>
11	86-HRM-009-210		POINTER,TUN
12	86-HRM-202-010		BAT-CONTACT,(+)
13	86-HRM-006-010		KNOB,RTRY TUN
14	8Z-HRM-205-010		BAT,CONTACT(-)
15	8Z-HRL-032-110		CABI,REAR ASSY<[S]YL1,[S]YL,YJ>
15	8A-HRJ-020-010		CABI,REAR ASSY YZ J-049N<[S]YZ>
15	8A-HRJ-021-010		CABI,REAR ASSY YZ J-248B<[LM]YZ>
15	8A-HRJ-022-010		CABI,REAR ASSY YZ J-B140<[LD]YZ>
A	87-067-732-010		TAPPING SCREW, VT1.4-3
B	87-B10-044-010		V+1.7-6.5
C	87-067-691-010		SCREW VT+1.7-6

## COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow				

# TAPE MECHANISM EXPLODED VIEW 1/1





# TAPE MECHANISM PARTS LIST 1/1

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
1	84-ZM2-012-010		LEVER,PLAY G
2	84-ZM2-211-01K		GEAR,CONNECT
3	84-ZM2-222-010		SPR-T,PLAY
4	84-ZM2-015-010		LEVER,STOP G
5	84-ZM2-014-010		LEVER,REW G
6	84-ZM2-013-010		LEVER,FF G
7	84-ZM2-223-010		SPR-T,REW STOP
8	84-ZM2-232-010		BELT,MAIN
9	84-ZM2-221-010		FLY-WHL,P2
10	84-ZM2-230-010		CAPSTAN,P 1.8-25
11	84-ZM2-220-01K		BRG,P
12	84-ZM2-210-01K		GEAR,AUTO
13	84-ZM2-218-01K		CAP,GEAR AUTO
14	84-ZM2-208-01K		LEVER,SHIFT
15	84-ZM2-224-010		SPR-T,FF LOCK
16	84-ZM2-207-01K		LEVER,AUTO
17	84-ZM2-206-01K		LEVER,LOCK
18	84-ZM2-219-01K		PULLEY,MOTOR
19	87-045-385-019		MOT (BCY3B11)
20	84-ZM2-226-010		SPR-C,CLUTCH
21	84-ZM2-212-01K		GEAR,CLUTCH
22	84-ZM2-231-019		FELT,CLUTCH
23	84-ZM2-217-01K		SHAFT,REEL
24	84-ZM2-225-010		SPR-T,AUTO FIND
25	84-ZM2-216-01K		REEL TABLE,R
26	84-ZM2-215-01K		REEL TABLE,L
27	84-ZM2-228-010		SPR-C,BT
28	84-ZM2-233-110		PINCH ROL ASSY
29	84-ZM2-227-010		SPR-C,AZIMUTH
30	87-A90-272-010		HEAD,PH MS25P ETH
A	84-ZM2-242-019		S-SCREW,AZIMUTH-2-5.9

L ▶

A4 ▶

サービス技術ニュース	
番号	連絡内容
Gー	ー
Gー	ー
Gー	ー